Title (en)

A CONTROLLER FOR A POWER SUPPLY AND A POWER SUPPLY

Title (de)

STEUERGERÄT FÜR EIN NETZTEIL SOWIE NETZTEIL

Title (fr)

ORGANE DE COMMANDE POUR BLOC D'ALIMENTATION ÉLECTRIQUE ET BLOC D'ALIMENTATION ÉLECTRIQUE

Publication

EP 3920398 A1 20211208 (EN)

Application

EP 20178511 A 20200605

Priority

EP 20178511 A 20200605

Abstract (en)

A controller for controlling a DC-DC converter in a discontinuous conduction mode, DCM, the controller comprising: an output module configured to provide a switch control signal to the DC-DC converter, the switch control signal having an on-time and a switching frequency; an on-time-control-module configured to: receive a first compensation signal, wherein the first compensation signal is based on the output voltage of the DC-DC converter; and set the on-time of the switch control signal based on the first compensation signal; and a frequency-control-module configured to: receive a second compensation signal, wherein the second compensation signal is based on the output voltage of the DC-DC converter; and regulate the second compensation signal to a target range by setting the switching frequency of the switch control signal to one of a plurality of pre-defined discrete switching frequencies.

IPC 8 full level

H02M 3/156 (2006.01)

CPC (source: EP US)

H02M 1/0025 (2021.05 - US); **H02M 3/156** (2013.01 - EP); **H02M 3/157** (2013.01 - US); **H02M 3/158** (2013.01 - EP); H02M 1/0035 (2021.05 - EP); H02M 1/0041 (2021.05 - EP); H02M 1/0054 (2021.05 - EP); Y02B 70/10 (2013.01 - EP)

Citation (search report)

- [XI] US 9312765 B2 20160412 - WALSH GREGORY [GB], et al
- [XI] US 2018337601 A1 20181122 - VADNERKAR SARANG [US], et al
- [I] US 2007170902 A1 20070726 - CHEN GANG [HK], et al
- [I] US 2009174440 A1 20090709 - MAN TSZ YIN [HK], et al
- [A] US 2018123440 A1 20180503 - LEE SANG-GUG [KR], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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